## EXPLANATION OF DATA

The information presented here was compiled on deaths, which came under the jurisdiction of the Medical Examiner during the calendar year 2003. (*Please refer to Page 3 outlining this jurisdictional definition*.) The role of alcohol, drugs, and firearm use in violent deaths is emphasized in the report. Health agencies, safety councils, and lawmakers may find these statistics useful. If the quality of life in King County is to be improved perhaps this report can serve as the basis for change.

The geographic area served by the Medical Examiner includes all 2,130 square miles of King County, bounded by Pierce County to the south, Snohomish County to the north, Kittitas and Chelan Counties to the east and Puget Sound to the west. In 2000 the King County population was estimated to be 1,737,0349. Included within King County are 39 cities and towns including Seattle, the state's largest city. Also within King County are Mercer Island, Vashon Island, two major airports and several colleges and universities – all coming under the area served by the Medical Examiner. In King County more than twenty hospitals as well as major trauma centers serve the entire Pacific Northwest region.

Demographics in this report are summarized from individual cases under jurisdiction of the Medical Examiner, and presented here in aggregate form. The location (Nearest Incorporated City to the Fatal Incident, Table 1-8, Page 17) represents the location of the incident, to the nearest city, not the residential address of the individual. Each manner (category) of death is subdivided into the various sub-groupings (methods) appropriate to that manner, which together form a more detailed description of the cause and manner of death.

The variables displayed in the tables such as race, gender, age, etc., have been selected as those most likely to assist and interest individuals using this data in assembling a profile of death statistics for 2003. According to 2000 Census estimates, racial distribution of King County is 75.7% White, 5.4% Black, 4.1% two or more races indicated (new category for the year 2000), 11.3% Asian including Hawaiian and other Pacific Islanders, 0.9% Native American, and 2.6% other. Hispanic origin is a separate question from race in Census data and cannot be used to compare with Medical Examiner data.

Medical Examiner figures cannot be directly compared to the racial distribution of King County residents. The main reason for this is that, as emphasized in Table 1-9 on page 19, in 19.6% of the Medical Examiner cases the incident leading to death occurred outside of King County and the decedent was probably not a resident of King County. However, as a rough estimate, the only manner of death that varies from the racial distribution of the county by a large percentage is Homicide (see discussion on page 41).

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<sup>&</sup>lt;sup>1</sup> PL94-171 Redistricting File from the 2000 Census of Population and Housing.

Age groups are divided into youth and adult. The youth groups are infants (newborn to 11 months), toddlers (1-5 years), grade school (6-12 years), junior high (13-15 years), and high school (16-19 years). Adult age groups are in corresponding decades with the last being 90 years old or older.

Blood alcohol (ethanol) data included here represent the blood level at the time of death. Alcohol is metabolized at a rate of 0.015 to 0.018 grams percent per hour. Thus, if there is a significant survival interval, the blood alcohol at the time of death will be lower than at the time of incident. Consequently, blood alcohol tests are not performed in cases where death occurs more than twenty-four hours after the fatal injury. For these reasons, an unknown number of cases not tested or showing no blood alcohol may actually have had a measurable alcohol concentration at the time of the incident.

Three sections are included that review specific issues. Data are presented which highlights deaths due to drugs, firearms, and death among children and youth. The firearm data pertain to the victim because data relating to the shooter are not included in the Medical Examiner's investigation. On deaths among children and youth, the analysis focuses on violent, non-natural causes of death.

Data on natural deaths are included. However, these deaths due to natural causes are not representative of all natural deaths in King County. Natural deaths which are investigated by the Medical Examiner are those which occur suddenly and unexpectedly with no physician in attendance, or under suspicious circumstances. Such natural deaths comprise 42.7% (775/1,815) of all deaths investigated by the Medical Examiner.

The "circumstances undetermined" category includes deaths in which the manner could not be clearly determined. In some cases, serious doubt existed as to whether the injury occurred with intent or as a result of an accident. In others, lack of witnesses or prolonged time between death and discovery precluded the accurate determination of the circumstances surrounding death. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death.

Those interested in obtaining more specific information should seek our assistance, as additional data are available and more specific analysis is possible.

### MEDICAL EXAMINER CASES IN 2003

The following provides a summary of the raw data from the Medical Examiner's 2003 cases.

In 2003 there were an estimated 13,090 deaths in King County <sup>1</sup> (0.75% of a 2000 population estimate of 1,737,034). Of these deaths, 7,609 (58%) were reported to the Medical Examiner by medical and law enforcement personnel. Based on analysis of the scene and circumstances of death, and the decedent's medical history gathered by the medical investigators, the Medical Examiner Division assumed jurisdiction in 1,883 of these reported deaths, of which 68 were ultimately found to be non-human remains. Throughout the discussion of data that follows, except where stated, the non-human, and archeological cases are excluded. The number of applicable cases used in this report is 1,815 deaths.

Of note is that there were 5,794 deaths reported to the Medical Examiner in which jurisdiction was not assumed. The Medical Examiner's Office applies a strict interpretation of the legislative language "persons who die suddenly when in apparent good health and without medical attendance within thirty-six hours preceding death" (RCW 68.50). Jurisdiction is only assumed if both conditions (lack of medical care, apparent good health) apply and there is no attending outside physician with sufficient knowledge of the individual's natural disease condition who is able to certify the death.

Autopsies were performed in 65.8% (1,194/1,815) of the jurisdictional deaths. Autopsies by a Medical Examiner pathologist were not performed in deaths where scene, circumstances, medical history, and external examination of the body provided sufficient information for death certification. In 2003 there were 339 such deaths, accounting for 18.7% (339/1,815) of the total deaths. In addition, there were 279 deaths (15.4%) (279/1,815) certified by attending private physicians after review by and consultation with the Medical Examiner.

Several factors appear repeatedly in the unnatural deaths. Of all traffic fatalities in which tests were performed, 36% (43/120) tested positive for presence of alcohol (ethanol) in the blood. In recognition of the importance of safety devices in traffic accidents, Medical Examiner data indicate that of the 113 vehicle occupants who died, 42.5% (48/113) were wearing restraints.

In 24 deaths involving motorcyclists, 75% (18/24) were wearing helmets. The remaining six were either not wearing restraints or helmets or represent cases in which the use of those items is not known.

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<sup>1</sup> Death certificates filed in King County for 2003.

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Firearms were the most frequent instrument of death in the homicides and suicides, accounting for 56% (52/93) of the homicides and 47% (101/217) of the suicides.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 42.7% (775/1,815) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2003 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County and Medical Examiner Cases

DEATHS	OF
DEATIIS	DEATHS
482	26.6%
179	9.9%
93	5.1%
775	42.7%
217	11.9%
69	3.8%
1,815	100.0%
68	
1,883	
1,815	
_	
5,481	
13,090	
	1,883 1,815 A) <sup>5</sup> 5,794 5,481

<sup>&</sup>lt;sup>2</sup> The letters following each manner of death will be used in most tables throughout this report.

<sup>&</sup>lt;sup>3</sup> These cases include sixty-five (65) non-human bones and three (3) non-human tissue or remains.

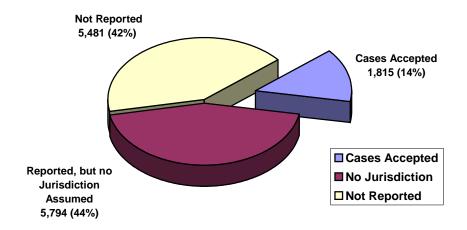
<sup>&</sup>lt;sup>4</sup> This is the total number of cases that will be referred to throughout this report unless otherwise noted.

 $<sup>^{5}</sup>$  Non-applicable includes sixty-five (65) non-human bones and three (3) non-human tissue or remains.

<sup>&</sup>lt;sup>6</sup> From King County Vital Statistics data.

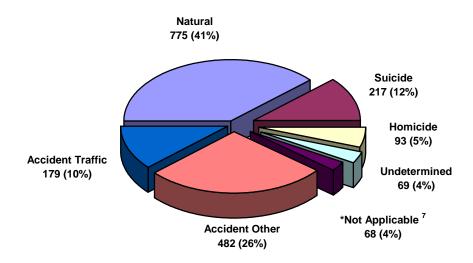
**Graph 1-1** All King County Deaths with Medical Examiner Jurisdiction Shown

There were 13,090 deaths in King County in 2003.



**Graph 1-2** Manner of Death for All Medical Examiner Jurisdiction Cases

Jurisdiction assumed in 1,883 cases

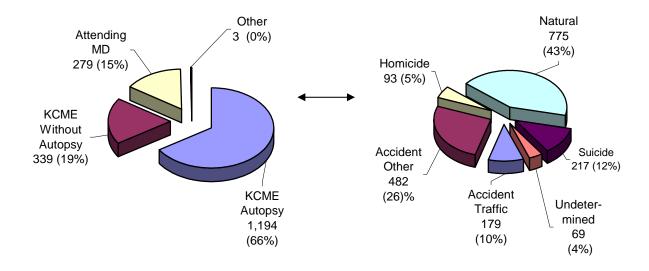


 $<sup>^{7}</sup>$  Non-applicable includes sixty-five (65) non-human bones and three (3) non-human tissue or remains.

Table 1-2 Method of Certification and Manner of Death

CERTIFICATION		M	TOTAL	PERCENT				
<u> </u>	Α	Т	Н	N	S	U	TOTAL	LINGLINI
KCME Autopsies	301	140	91	430	168	64	1,194	66%
KCME External Exams	101	37	0	150	49	2	339	19%
KCME Other	0	0	2 <b>8</b>	0	0	1	3	0%
Attending Physician	80	2	0	195	0	2	279	15%
Totals	482	179	93	775	217	69	1,815	

**Graph 1-3** Method of Certification for All Medical Examiner Jurisdiction Cases



Note: In 2003, the remains of two (2) Homicide Deaths were returned to the county(s) where the original injuries occurred. Being a Regional Trauma Center, King County receives victims of violence from surrounding counties. By prior agreement, remains of these victims are returned to the originating county for autopsy by the Medical Examiner of record.

# MANNER OF DEATH IN 2003 King County Medical Examiner General Cases

Table 1-3 Gender and Manner of Death

GENDER	А	Т	Н	N	S	U	TOTAL	PERCENT
Male	295	118	67	526	161	44	1,211	66.7%
Female	187	61	26	249	56	25	604	33.3%
Total	482	179	93	775	217	69	1,815	

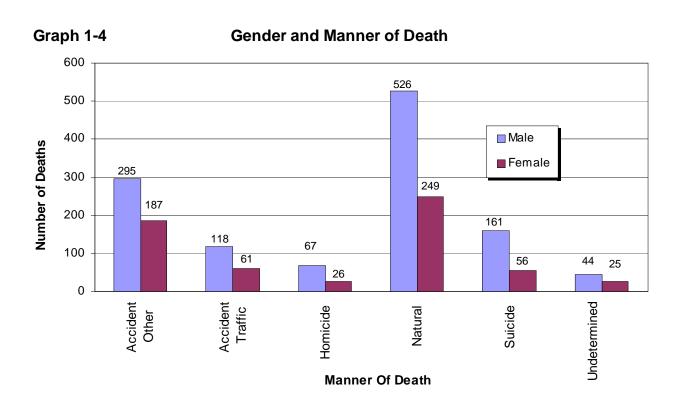


Table 1-4 Age and Manner of Death

Table 1-	Table 1-4 Age and Manner of Death									
	Г		MA	ANNER C	OF DEATH	l		SUB		DEDCEN
AGE/GE	NDER	Α	Т	Н	N	S	U	TOTAL	TOTAL	PERCEN T
Under 1 y									38	2.1%
	Male	3	1	1	13	0	3	21		
4.5	Female	2	0	1	12	0	2	17	47	0.00/
1-5 years	Male	5	1	0	2	0	2	10	17	0.9%
	Female	3	1 0	1	3	0	0	7		
6-12 years		J	U	,	J	- O	U	'	8	0.4%
,	Male	1	0	1	1	0	1	4		<b>U</b> . 170
	Female	2	0	0	0	2	0	4		
13-15 yea	irs								16	0.9%
	Male	6	4	2	0	0	0	12		
	Female	0	2	0	2	0	0	4		
16-19 yea									52	2.9%
	Male	5	15	3	5	8	1	37		
00.00	Female	1	4	6	0	4	0	15	450	0.00/
20-29 yea	irs   <i>Male</i>	24	28	21	11	22	6	112	156	8.6%
	Female	9	10	2	14	6	3	44		
30-39 yea		9	10	2	17	U	3		189	10.4%
	Male	29	12	18	41	34	4	138	100	10.170
	Female	19	1	5	14	10	2	51		
40-49 yea	irs								318	17.5%
	Male	44	28	13	92	28	12	217		
	Female	29	7	7	30	19	9	101		
50-59 yea									334	18.4%
	Male .	57	8	6	137	31	10	249		
00.00	Female	21	13	1	35	10	5	85 I	404	40.50/
60-69 yea	irs <i>Male</i>	19	5	1	98	12	3	138	191	10.5%
	Female	10	6	0	<i>36</i>	0	1	53		
70-79 yea		70	· ·	U		U	,		187	10.3%
	Male	27	8	0	61	14	0	110		
	Female	22	8	0	44	2	1	77		
80-89 yea	rs								219	12.1%
	Male	53	8	0	52	10	2	125		
	Female	42	8	2	42	0	0	94		
90+ years	•								88	4.8%
	Male .	22	0	0	13	2	0	37		
Linknown	Female	27	2	0	17	3	2	51 	2	0.40/
Unknown	Male	0	0	1	0	0	0	1	2	0.1%
	Female	0	0	1	0	0	0	1		
	Unknown	0	0	0	0	0	0	0		
Total		482	179	93	775	217	69		1815	

Table 1-5 Race and Sex by Manner of Death

RACE &	RACF &		MA	NNER (	OF DEATH	<del></del>		SUB		
GENDER		Α	Т	Н	N	S	U	TOTAL	TOTAL	PERCEN T
White									1,483	81.7%
	Male	251	101	35	412	143	36	978		
Fe	male	169	48	13	208	45	22	505		
Black									140	7.7%
	Male	13	7	17	51	7	3	98		
Fe	male	9	2	6	21	3	1	42		
Asian									112	6.2%
	Male	12	6	9	32	9	3	71		
Fe	male	5	9	4	16	7	0	41		
Native Americ	an								42	2.3%
	Male	14	3	2	11	1	1	32		
Fe	male	2	1	2	4	1	0	10		
Other									28	1.5%
	Male	3	0	3	15	1	1	23		
Fe	male	2	1	0	0	0	2	5		
Unknown									10	0.6%
	Male	2	1	1	5	0	0	9		
Fe	male	0	0	1	0	0	0	1		
Total		482	179	93	775	217	69		1,815	

Table 1-6 Marital Status and Manner of Death

MARITAL	MANNER OF DEATH				Н		SUB			
& GEN	NDER	Α	Т	Н	N	S	U	TOTAL	TOTAL	PERCENT
Never Mar	ried	128	76	47	230	87	32		600	36.8%
	Male	94	53	38	175	70	22	452		
	Female	34	23	9	55	17	10	148		
Married		152	51	23	189	69	17		501	27.6%
	Male	99	36	13	140	49	11	348		
	Female	53	15	10	49	20	6	153		
Divorced		99	33	16	184	48	14		394	21.7%
	Male	63	22	13	126	32	8	264		
	Female	36	11	3	58	16	6	130		
Widowed		97	17	1	112	11	3		241	13.3%
	Male	35	5	0	38	8	1	87		
	Female	62	12	1	74	3	2	154		
Unknown		6	2	6	60	2	3		79	4.4%
	Male	4	2	3	47	2	2	60		
	Female	2	0	3	13	0	1	19		
	Unknown	0	0	0	0	0	0	0		
To	tal	482	179	93	775	217	69		1815	

**Graph 1-5** Marital Status and Manner of Death

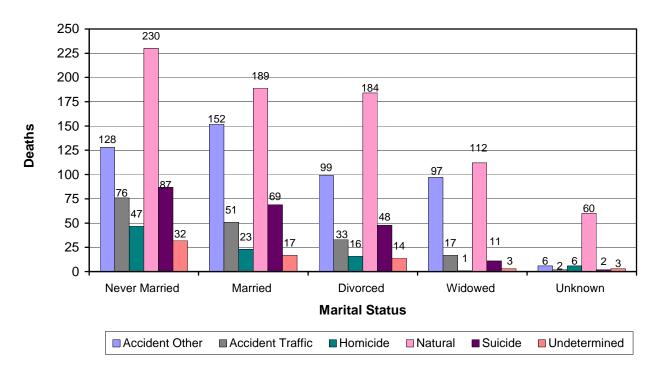


Table 1-7 Month and Manner of Death

MANNER OF DEATH								
MONTH	А	Т	Н	N	S	U	TOTAL	PERCENT
Previous Year	2	0	0	9	1	2	14	0.8%
January	31	18	8	57	13	6	133	7.3%
February	23	12	5	53	10	4	107	5.9%
March	35	11	9	60	13	7	135	7.4%
April	35	12	5	67	23	2	144	7.9%
May	45	9	7	67	24	4	156	8.6%
June	44	19	7	65	19	9	163	9.0%
July	52	15	8	59	17	4	155	8.5%
August	44	20	12	64	22	9	171	9.4%
September	42	15	6	62	17	3	145	8.0%
October	36	18	13	74	20	10	171	9.4%
November	50	16	6	81	17	4	174	9.6%
December	43	14	5	56	21	5	144	7.9%
Unknown	0	0	2	1	0	0	3	0.2%
Total	482	179	93	775	217	69	1,815	

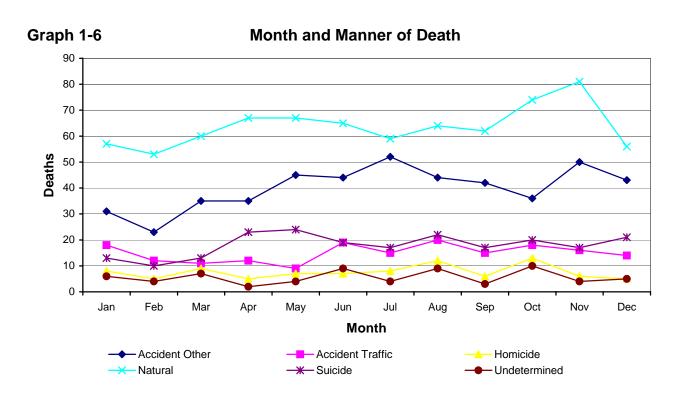


Table 1-8 Nearest Incorporated City to the Fatal Incident <sup>9</sup>

		MANI	NER OF D	EATH		_	
CITY	А	Т	Н	S	U	TOTAL	PERCENT
Algona	0	0	0	1	0	1	0.1%
Auburn	16	6	3	12	2	39	3.8%
Bellevue	17	4	0	13	2	36	3.5%
Black Diamond	1	0	1	2	0	4	0.4%
Bothell	4	2	0	2	1	9	0.9%
Burien	6	1	1	3	3	14	1.3%
Carnation	0	0	0	0	0	0	0.0%
Clyde Hill	0	0	0	0	0	0	0.0%
Covington	0	1	0	1	0	2	0.2%
Des Moines	9	0	0	1	0	10	1.0%
Duvall	0	2	0	1	0	3	0.3%
Enumclaw	4	4	1	2	0	11	1.1%
Fall City	0	0	0	1	1	2	0.2%
Federal Way	13	3	2	8	4	30	2.9%
Issaquah	4	3	0	7	0	14	1.3%
Kenmore	3	2	0	3	1	9	0.9%
Kent	18	9	16	14	2	59	5.7%
Kirkland	11	4	1	7	4	27	2.6%
Lake Forrest Park	2	1	0	0	0	3	0.3%
Maple Valley	1	2	0	1	0	4	0.4%
Maury Island	0	0	0	0	0	0	0.0%
Medina	2	0	0	2	0	4	0.4%
Mercer Island	4	0	0	1	0	5	0.5%
Milton	1	0	0	0	0	1	0.1%
Newcastle	1	0	1	1	0	3	0.3%
Normandy Park	1	0	0	1	0	2	0.2%
North Bend	2	2	0	3	0	7	0.7%

<sup>9</sup>  $\,$  Note: Table 1-8 does not include cases where manner of death is "Natural".

Table 1-8 (con't) Nearest Incorporated city to the Fatal Incident <sup>9</sup>

	MANNER OF DEATH						
CITY	Α	Т	Н	S	U	TOTAL	PERCENT
Pacific	0	0	0	0	0	0	0.0%
Preston	0	0	0	0	0	0	0.0%
Ravensdale	0	2	0	0	0	2	0.2%
Redmond	7	1	1	5	2	16	1.5%
Renton	19	8	5	10	2	44	4.2%
Sammamish	2	1	0	1	1	5	0.5%
SeaTac	6	1	1	2	0	10	1.0%
Seattle	201	43	38	82	29	393	37.8%
Shoreline	13	4	3	10	1	31	3.0%
Skykomish	0	0	0	1	0	1	0.1%
Snoqualmie	4	0	1	1	0	6	0.6%
Tukwila	4	2	1	1	0	8	0.8%
Vashon Island	1	2	1	2	2	8	0.8%
Woodinville	2	1	0	2	0	5	0.5%
Yarrow Point	0	0	0	0	0	0	0.0%
Unincorporated King County	3	1	0	0	0	4	0.4%
Outside of King County	99	67	15	13	10	204	19.6%
Unknown Location <sup>10</sup>	1	0	1	0	2	4	0.4%
Totals	482	179	93	217	69	1040	

Note: Table 1-8 does not include cases where manner of death is "Natural".

<sup>&</sup>lt;sup>10</sup> The nearest city to incident and the suspected location of fatal incident are different.

#### **OUT OF COUNTY CASES IN 2003**

Within King County are several major hospitals and trauma centers that serve the entire Pacific Northwest and western United States. Consequently, there are numerous deaths each year where the incident leading to death occurred outside of King County. Because death occurred within King County, it comes under the jurisdiction of the King County Medical Examiner. In 2003 there were 204 deaths representing 19.6% (1,815-775=1,040) where the incident (excluding "Natural" deaths) occurred out of county. Table 1-9 displays these deaths by incident location and manner.

Table 1-9 Fatal Incident Occurred Outside of King County 9

		MANI	NER OF DE	ATH		
INCIDENT LOCATION	А	Т	Н	S	U	TOTAL
Alaska	2	1	0	2	0	5
Idaho	2	1	0	0	0	3
Oregon	1	0	0	0	0	1
Montana	1	2	1	0	0	4
Washington						
Kitsap County	11	2	3	4	0	20
Lewis County	3	4	0	0	0	7
Pierce County	8	7	1	0	1	17
Snohomish County	25	16	4	3	3	51
Thurston County	2	4	0	2	0	8
Other Counties	44	30	6	2	6	88
Washington Sub-total	(93)	(63)	(14)	(11)	(10)	(191)
Outside of the Country	0	0	0	0	0	0
Total	99	67	15	13	10	204

<sup>&</sup>lt;sup>9</sup> Note: Table 1-9 does not include cases where manner of death is "Natural".

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